Transforming the Army

MRMC Commander Conference
05 February, 2003

Presented By:
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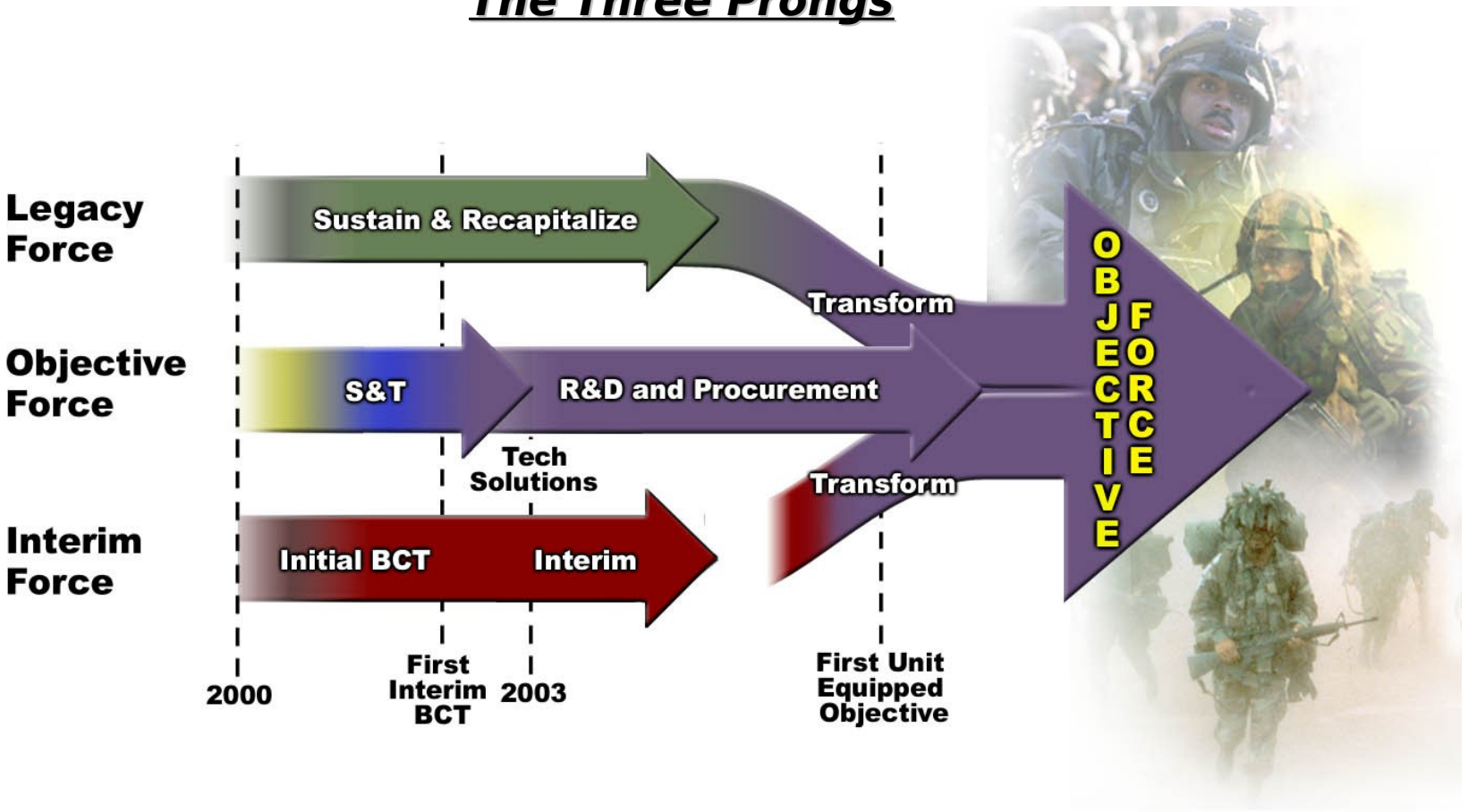
Office of the Assistant Secretary of the Army
(Acquisitions, Logistics and Technology)

The Army Path

The Three Prongs



. . . Responsive, Deployable, Agile, Versatile, Lethal, Survivable, Sustainable.

The Legacy Force

Hot Topics:

- Support of the War
- Current Readiness Issues
- Support the Army's Priorities
- Support Transformation
  - Objective
  - Interim
  - Legacy

Current Status:

- Support of the War

Continues

- 17 Recap Programs Approved by AAE/VCSA
- Recapitalization is Focused on the Counter Attack Corps

Recapitalization

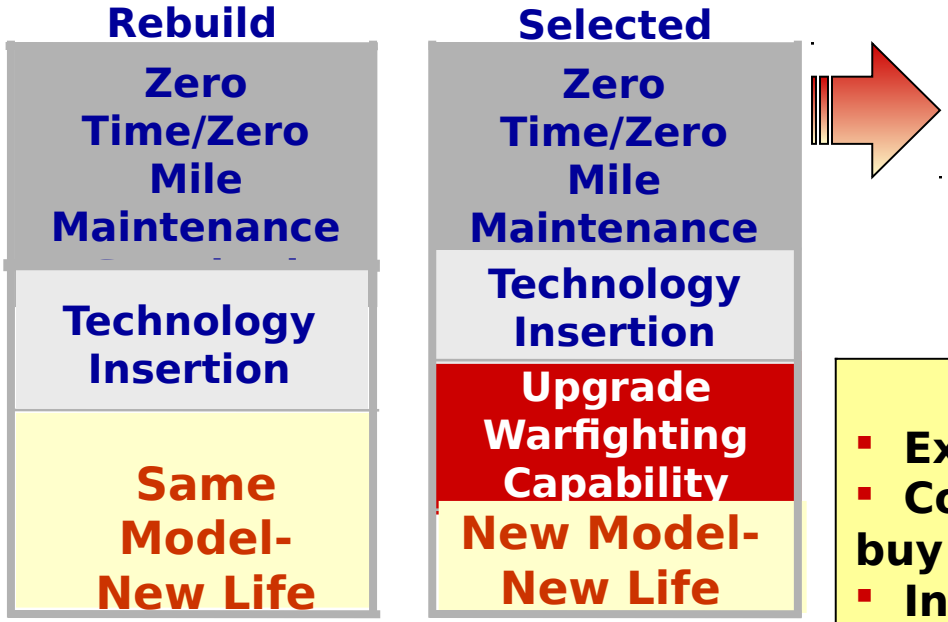
LAYING THE FOUNDATION

The rebuild and selected upgrade of currently fielded systems to ensure operational readiness and a zero time/zero mile system.

Rebuild - Restores system to a like-new condition in appearance, performance, and life expectancy; inserts new technology to improve safety, reliability and maintainability

Selected Upgrade - Rebuild of system and adds warfighting capability improvements to address capability shortcomings

Two Paths



RECAP GOALS:

- ✓ **Improve unit effectiveness and warfighting capability**
- ✓ **Extend service life**
- ✓ **Reduce O&S costs**
- ✓ **Improve reliability, safety, maintainability**

What systems do we recap?

The criteria we established …

- **Exce**
- **Cost** **or buy new)**
- **In fleet beyond 2020**

Example-AH-64 Decentralization

Selected Upgrades

Task Force Hawk Fixes

- ***MTADS/PNVS**
  - Second Gen FLIR
  - Obsolescence
- HF Radio
- ***Internal Aux Fuel Tanks**
- ATIRCM
- SIRFC
- Video Transmission/Reception
- New Video Recorder

*** TF Hawk (-)**

AH-64D Level I Enhancements

Upgraded Up Front Display	Digital Map
EPMS Upgrades	Single Point Data Download
EBC FCDB	IETM Upgrades
Expanded DTC	BDAR Manual
Fire Extinguisher	Breakout Box
Inertia Reel	TEDAC Integration
ELT/ULT	

Rebuild

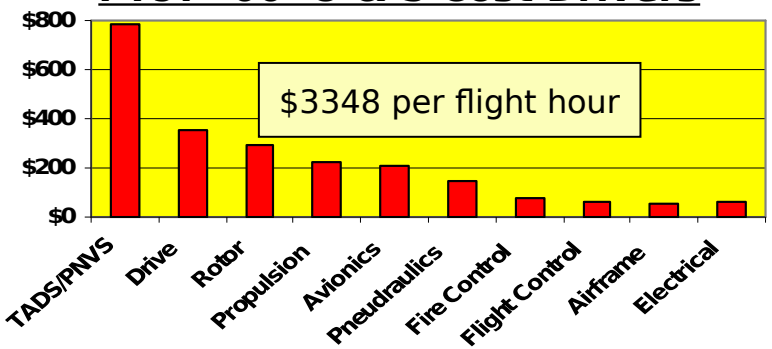
R&S Fixes

Main Transmission Overhaul	Main Rotor Blade Fixes	Funny Harness
Emergency Hydraulics	Tail Rotor Blade Fixes	Gun Turret Overhaul
Hydraulic Sampling	Engine Nose Gearbox	"-65" Firewall
Fuel Released in Ammo Bay	Prim & Second. Nozzles	176 Frame
APU PTO Clutch	T&R Gearboxes	Fuel Crossfeed S
Main Rotor Head w/ Strap Pack	Prim. Nozzle Marmim Clamp	Canopy Remova
Fuel Vapor in Cockpit	APR-39 Water Intrusion	Main Landing Gear
Cracking Wing Pylon	BUSC Long./Dir. Actuator	Lead Lag Links
Bushing, Bearings & Hoses	Engine In Flight Power Loss	AP Fuel Valve & Line

Component Recap

Swashplate, Control	PECA	Laser Transceiver Unit
TADS	Manifold, Hydraulic	Cylinder Assembly
Pump, Axial Pistons	Control Module ASSY	Day Sensor Subassy
Actuator, Electro-ME	Nitrogen Inerting	IVD HDD
Processor, Signal, FI	Drive Unit, Angle	ECS
Power Supply	Servocylinder	
CCD Camera	Pump, Hydraulic RAM	

FY97- 00 O & S Cost Drivers



FY00 Year % MC Drivers

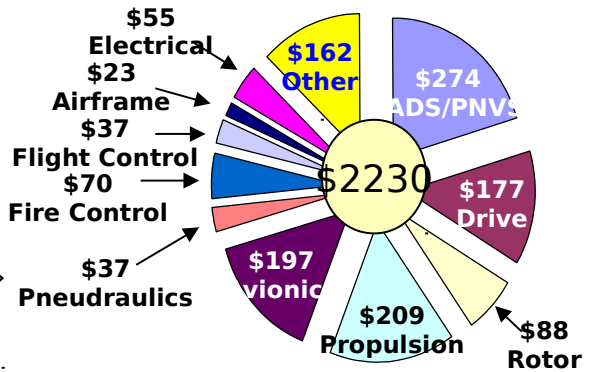
TADS/PNVS	**30%**
Main Transmission	**20%**
Main Rotor Head	**12%**
Main Rotor Blades	**9%**
Nose Gear Box	**5%**

* Observed trends, ongoing analysis to confirm data

(AH-64A Data)

R&S, MTADS& Component Recap

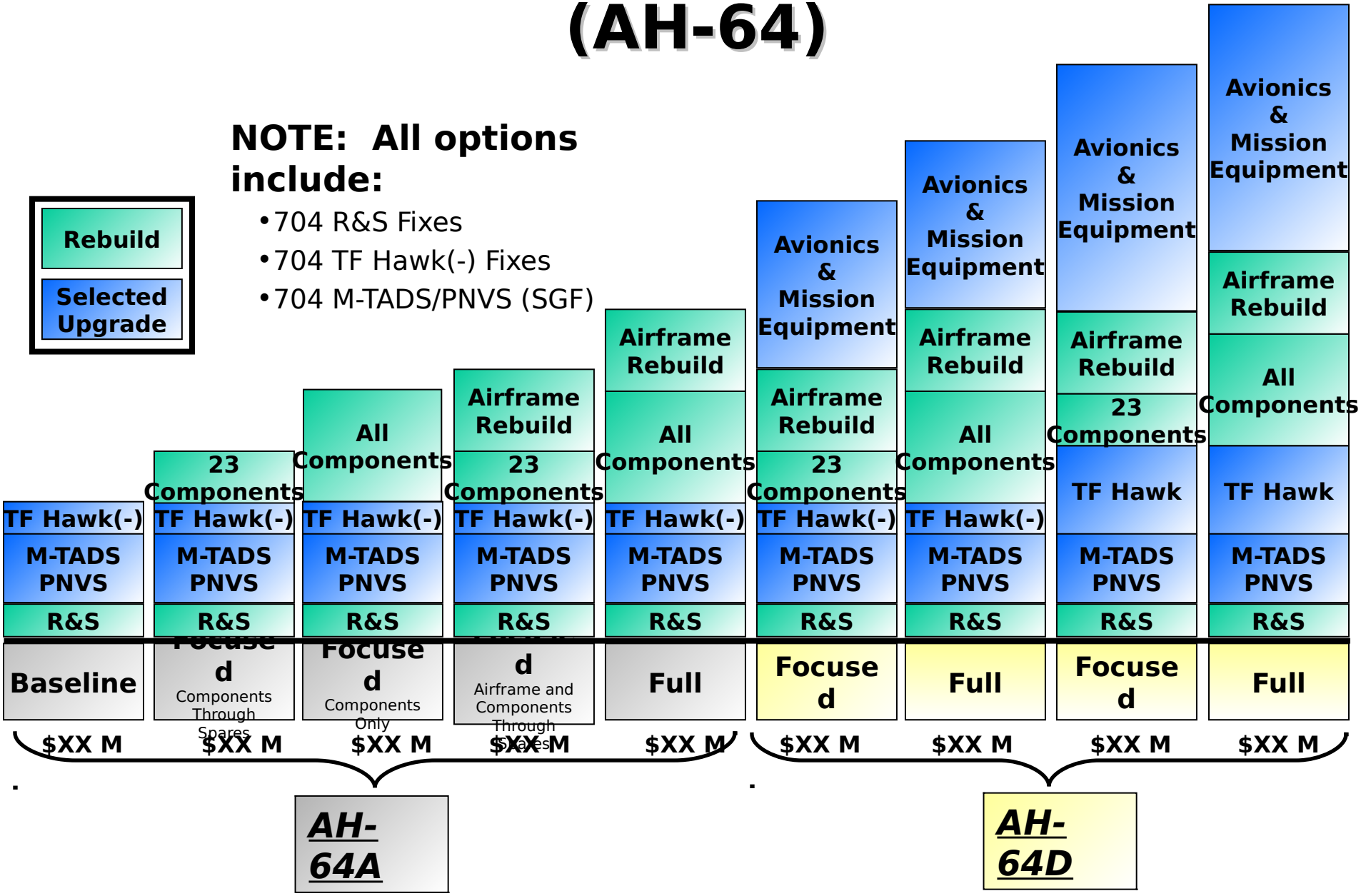
Projected Cost per Flight Ho



Example-Configuration Options (AH-64)

NOTE: All options include:

- 704 R&S Fixes
- 704 TF Hawk(-) Fixes
- 704 M-TADS/PNVS (SGF)



Recapitalization Programs

Aviation, Intelligence Electronic Warfare

AH-64D Apache

UH-60A/L/M Black Hawk

TPQ-36 (V5,V7,V8) Fire Finder

CH-47D/F Chinook

Ground Combat

M2A3/M3A3 Bradley

Field Artillery Ammunition Supply Vehicle

M1A1 AIM/M1A2 SEP Abrams Tank

M113A3 FOV

M88A1/A2 Recovery Vehicle

Missiles

M270A1 Multiple Launch Rocket System

Patriot GSE

Combat Support/Combat Service Support

Small Emplacement Excavator

HMMWV

Armored Combat Earthmover M9

Heavy Expanded Mobility Tactical Truck

Electronic Shops Shelter

One Outcome

- Extended service life
- Reduced Operating and Support (O&S) Cost
- Improved System Reliability, Safety, Maintainability
- Enhanced Capability

The Interim Force

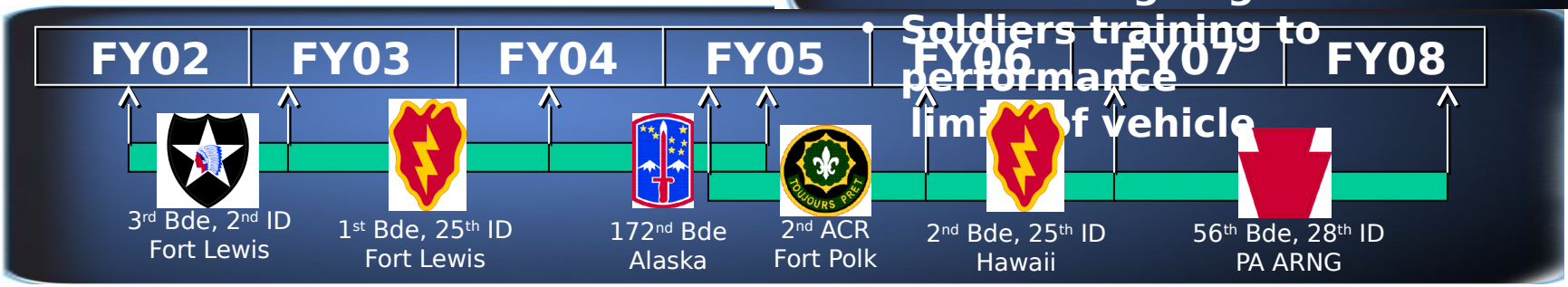
Hot Topics:

- C-130 Transportability
- Demonstrated performance
- Certification ongoing
- IOC in May 03

Current Status:

- 8 of 10 configurations in production
- First delivery in Feb 02
- Over 250 delivered to date
- Testing and fielding concurrently
- First vehicles fielded to A/5-20 IN in May 02
- Major safety testing completed; live fire ongoing
- Soldiers training to performance limits of vehicle

Current BCT 1-6 Fielding Schedule



The Objective Force

Hot Topics:

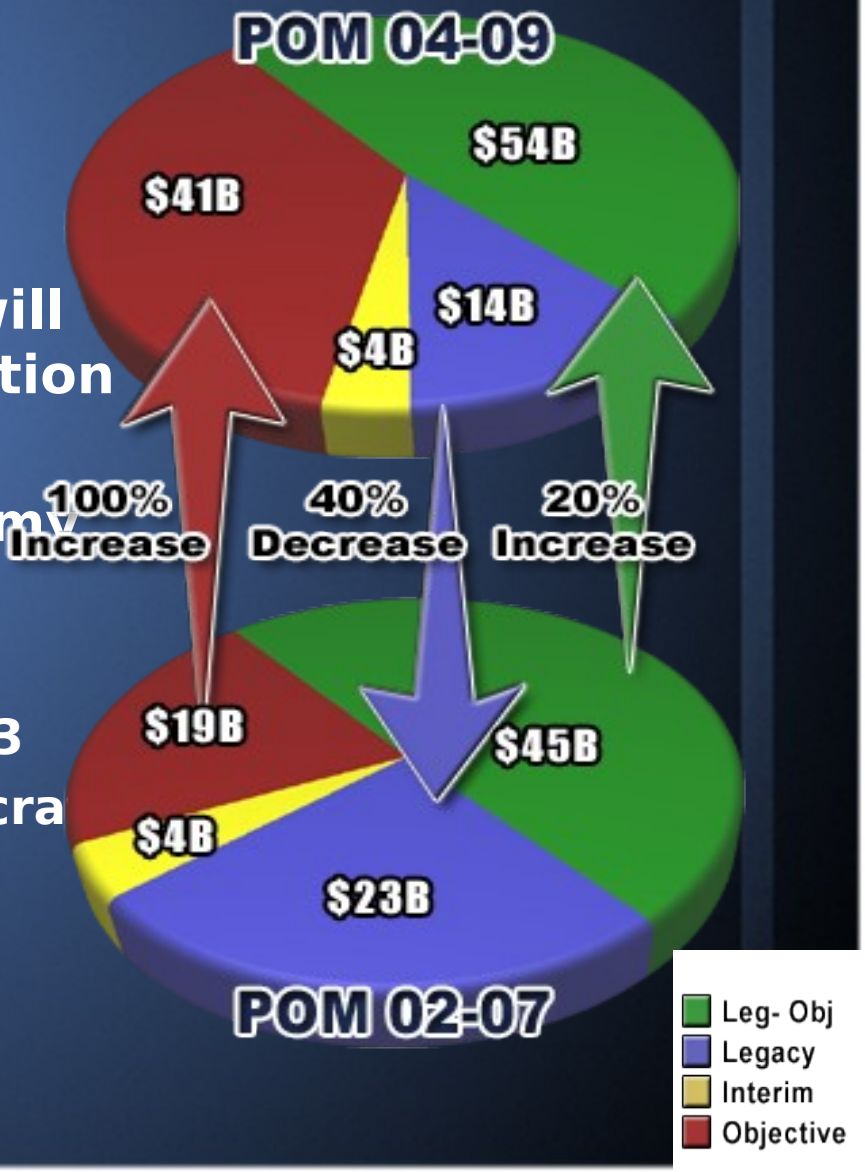
- Affordability
- IOC in FY10
- Technology Down Select for Block One
- FUE is FY 08
- FCS MNS was approved by the AROC on 31 October

Current Status:

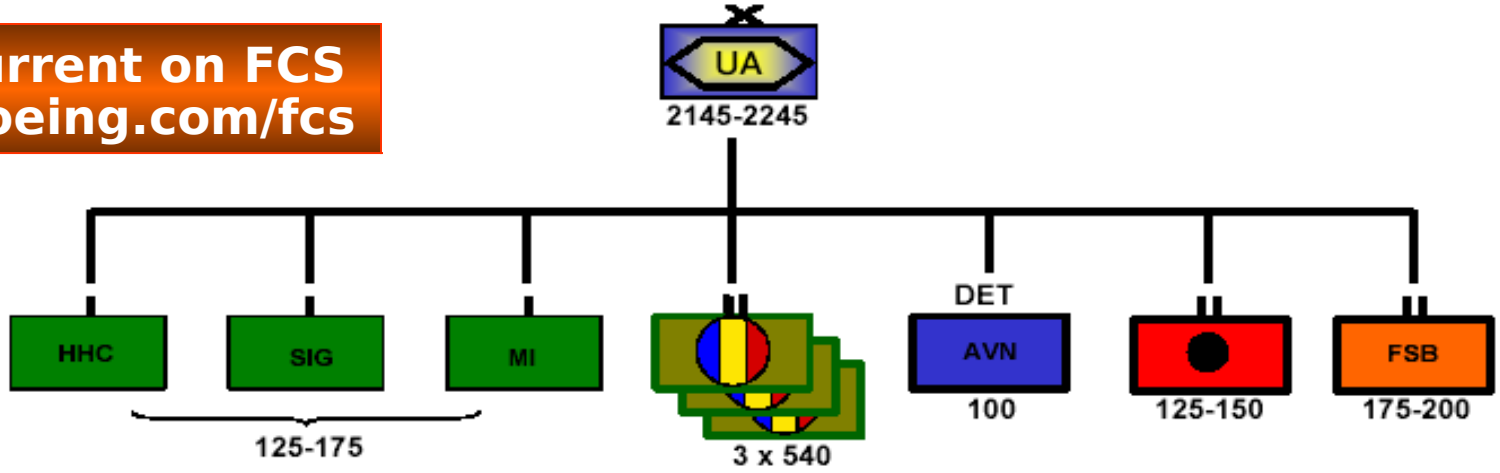
- 97% of S&T Investment is in FCS/Objective Force
- FCS LSI Contract Award, Mar 02

Army Investment

- 90% of RDA supports OF
  - 53% OF
  - 37% LF>OF
- Restructures/terminations will transfer $23B to transformation
  - ~ $17B non-Crusader
- Recap focused on 10% of Army systems
- Aviation transformation
  - Reduce airframes from 6 to 3
  - Retire 1130 Vietnam era aircra
  - Reduce platforms by 25%



Stay current on FCS
www.boeing.com/fcs



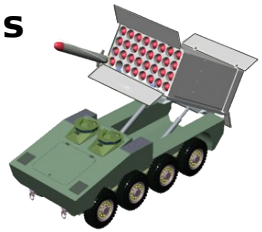
UA Pacing Items Recap

54	FCS Infantry Carrier	24	NLOS Mortar
54	FCS Mobile Gun System	108	Missile in a Box (Platform TBD)
80	C2 Vehicle	27	FCS-R&S Vehicles
12	Comanche	TBD	Armed Robotic Vehicles
18	NLOS Cannon	4	Q64 Radar
8	Brigade Tactical UAV (AVN)	60	FTTS (CL III bulk / V)
12	SUAV (NLOS BN, Recon Toops	36	Organic Air Vehicle (Company)
		TBD	Plt/Sqd Manportable Disposable Air Veh

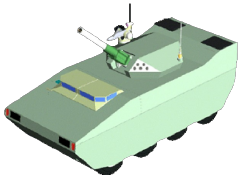
16-20T Manned Ground Platforms

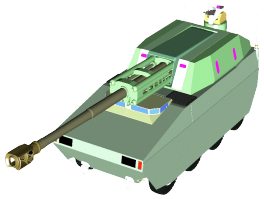
120mm BLOS/LOS

NetFires


SUAV Carrier

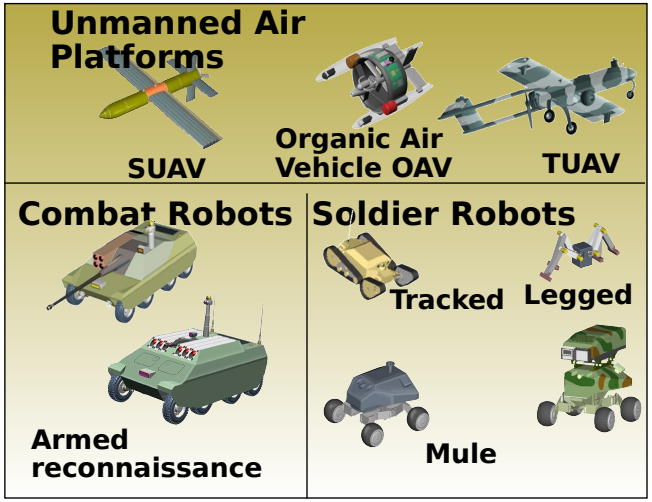
CBT/CS/CSS Functions


120mm Mortar


155mm NLOS

Reconnaissance and surveillance

*Complemented by 291 NDI vehicles



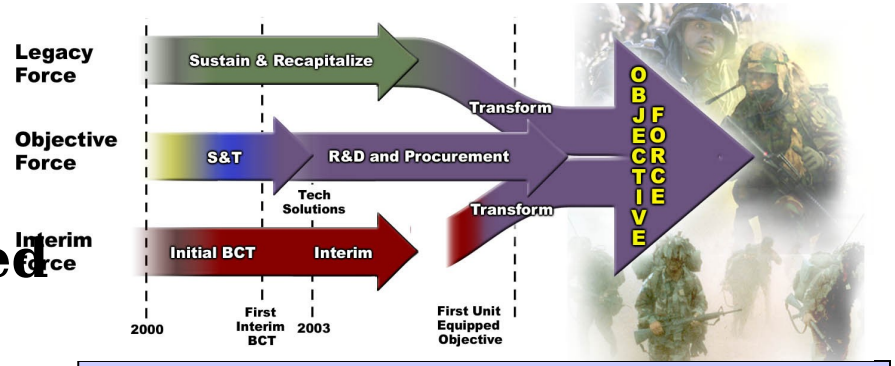
Unit Set Fielding (USF)

Systems of Systems Management

Integrated

+

Synchronized



= Synergy for the OBJ Fo

- **Multiple system fieldings (System of Systems) occurring during a defined fielding window to**
  - ✓ **Minimize C-5 window**
  - ✓ **Increased force effectiveness**
  - ✓ **Streamlined fielding process**

READINESS IS THE DRIVER

- **Integrates DTLOMS and synchronizes Life Cycle Support**
- **Fielding schedules focused on system interdependencies & operational and readiness impacts**
- **A disciplined modernization strategy that results in fielding of an increased capability/function**

Designed to be executed with Objective Force, vic 2010

Selected Units and Systems for Unit Set Fielding

COUNTERATTACK CORPS

Selected Upgrade	Rebuild
• M2A3 Bradley • M2701A1 MLRS • AH-64D • UH-60M • PAC-3	• Patriot • HEMTT • Firefinder • FAASV

- III Corps (AC & Selected RC)
- Most capable Legacy Force systems
  - ✓ M1A2 SEP
  - ✓ M2A3/M3A3 Bradley
  - ✓ AH-64D Longbow Apache
  - ✓ May include M1A1Ds
- Not intended as early deployers – will deploy and fight with assigned weapon systems
- Last active component heavy brigades to transform to the Objective Force

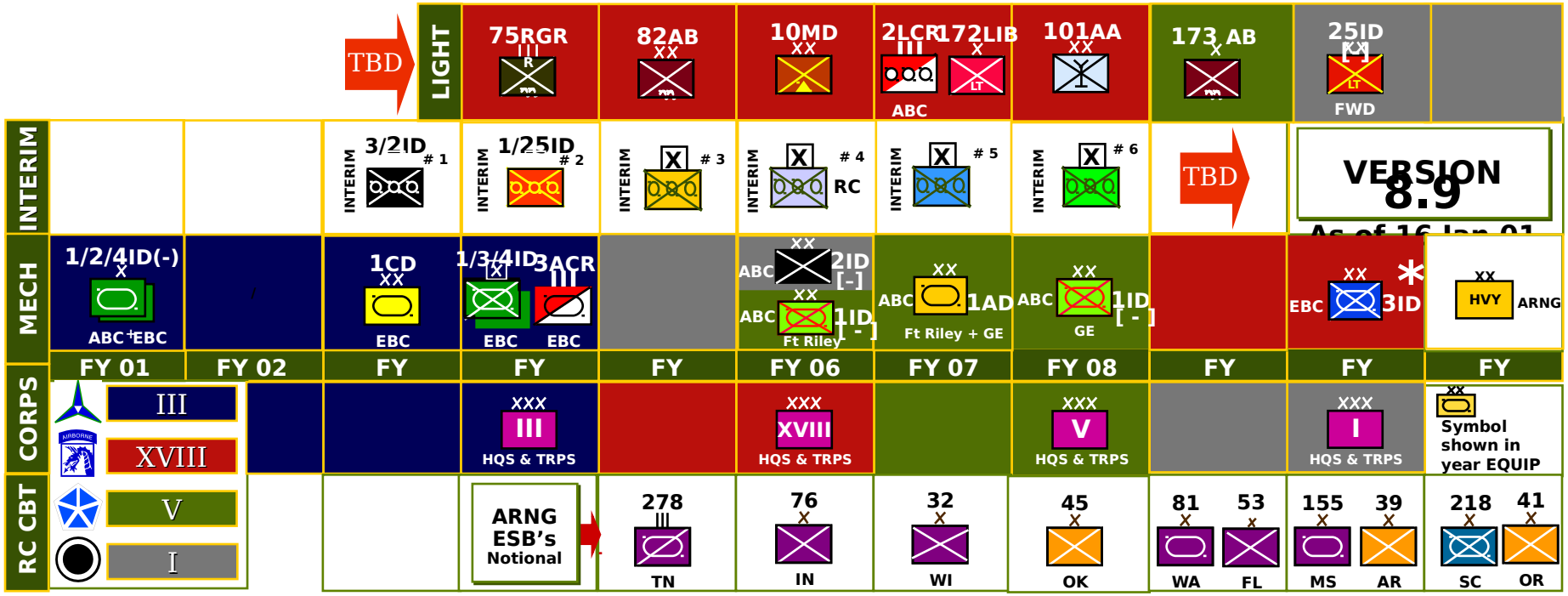
CONUS/INITIAL ENTRY/EARLY DEPLOYER

Selected Upgrade	Rebuild
• UH-60M • CH-47F • PAC-3	• M1A1D (AIM XXI) • M2A2D • Patriot

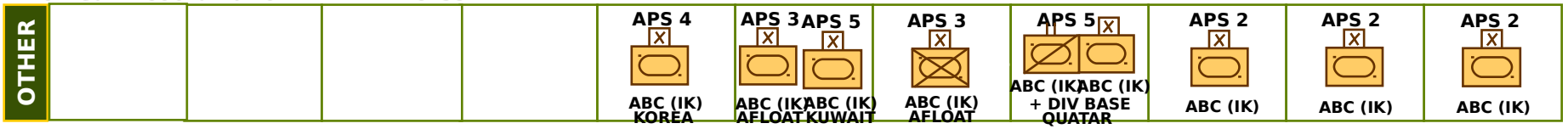
- XVIII Airborne Corps -- 82d, 101st; and 10th Mountain to be modernized with light, lethal initiatives
- CONUS based heavy brigades - Mech/Armor recap is “rebuild”
  - ✓ M1A1D
  - ✓ M2A2D (digitized)
- CONUS-based, non-counterattack corps active component brigades are first units to transform to Objective Force

Schedule

(G8 and G3 submitted a new schedule that is Pending Final OSD



Worked In Coordination With DAMO-SS



USFMS

This version is directly aligned with the approved (7 Dec 00) Army Order of Precedence (AOP) memo which re-orders distribution priorities. Interim Axis is being integrated into the USFMS. Both Initial Bdes will become Interim Bdes in FY 03 & 04 respectively based on completion of IAV fielding.

*** 3 ID modernization is tentative pending FY 03 decision. Symbol shown in year Equip phase is completed.**

Hot Topics

War on Terrorism

- Afghanistan
  - Expediting Field Requests
    - M4 Carbine
    - Interceptor Body Armor
    - Robotics
      - UGV (PackBot)

- Homeland Defense
  - The Joint Doctrine Community approved an initiative to develop Joint Doctrine for Homeland Security. (October 2001)
  - Application of Military systems
    - Operation Clear Sky (July 02)
      - Avenger and Sentinel Deployment in and around the National Capital Region

Questions/Concerns?

- Legacy Forces
  - Modernization
  - Recapitalization (Other Systems)
  - Operations and Maintenance (O&M)
- Interim Forces
  - Stryker
  - Millennium Challenge
  - Deployability
- Objective Forces
  - Future Combat Systems

Transforming the Army